

DIESEL IDLING FACT SHEET

Why Diesel Vehicles Idle

Truck drivers tend to idle their engines during rest periods to provide heat or air conditioning, to keep the engine warm during extreme temperatures, to maintain adequate battery voltage while using electrical appliances, safety, and habit.

Idling Facts

- Approximately ½ million trucks idle annually over 300 days per year.
- Diesel gas is idled away at a rate of 1 gallon per hour, equaling 2,400 gallons per truck of fuel annually.
- 1.2 billion gallons of diesel fuel are consumed each year from idling.
- Idling creates a cost of \$1.8 billion (@ \$1.50) annually.

Environmental Effects

- Every 28 hours in the U.S., the same amount of fuel is idled away as spilled in the Exxon Valdez disaster (11 million gallons).
- Diesel exhaust contains small particulates, known as particulate matter (PM). They are so small that several thousand of them could fit on the period at the end of this sentence. Diesel engines are the third largest human-made source of PM.
- Diesel exhaust contributes to ozone formation (smog), acid rain, and global climate change.
- Each idling truck emits over 21 tons of carbon dioxide (CO₂) and approximately 0.3 tons of nitrogen oxides (NO_x) annually, totaling over 11 million tons and 150,000 tons respectively.
- Diesel exhaust also contains sulfur dioxide (SO₂), carbon monoxide (CO) and hydrocarbons (HC).

Health Effects

- Small particles of soot and exhaust can penetrate human cells and damage them.
- Diesel exhaust is a major contributor to heart and lung disease, increased respiratory symptoms and/or disease, and decreases lung function.
- Diesel exhaust is a major contributor to premature death.
- Pollution from diesel vehicles can cause asthma attacks, work loss days, minor restricted activity days, and cancer.

Idling Reduction Technologies

- Auxiliary Units: 5-10 horsepower units installed on trucks used for heat/AC, electrical power, and heat to engine and fuel. Cost range from \$1,500 to \$7,000.
- Truck Stop Electrification: Truck stops provide individual parking spaces designed with electrical power, heat, and air conditioning. Cost varies.



Maricopa County
Revised November 2003

For more information on Diesel Idling:

Maricopa County Diesel idling Website: <http://www.maricopa.gov/envsvc/AIR/RULES/idling.asp>
Maricopa County Air Quality Division: (602) 506-6010
Maricopa County Air Quality Division-Diesel Idling: (602) 506-7086
Maricopa County Environmental Services Complaint line: (602) 506-6616
Maricopa County Environmental Services Complaint Website:
<http://www.maricopa.gov/envsvc/forms/complaint.asp>
Maricopa County Air Quality Public Workshop Line: (602) 506-0169
Governor's Brown Cloud Summit Website: <http://www.adeq.state.az.us/environ/air/browncld/>
EPA: <http://www.epa.gov/otaq/etrofit/idling.htm>